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# U. S. DEPARTMENT OF AGRICULTURE

FARMERS' BULLETIN No. 1324

## LAMB AND MUTTON AND THEIR USE IN THE DIET



**L**AMB AND MUTTON, like other meats, are nutritious and wholesome foods, and can often be used to advantage to increase the supply of fresh meats on the farm. This bulletin suggests good ways of preparing lamb and mutton for the table and of combining them with other materials of suitable flavor.

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# LAMB AND MUTTON AND THEIR USE IN THE DIET.

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**L**AMB AND MUTTON have long been important foods in many parts of the world. The term "lamb" is usually applied to the flesh of a sheep less than a year old, while that of older animals is known as "mutton."

Mutton is a very popular meat in England, but in this country lamb is much preferred and in many retail markets mutton is not to be found. This one-sided demand is naturally one reason for the comparatively high prices charged for lamb.

Formerly much of the prejudice against mutton was probably due to the strong flavor of meat from old or carelessly slaughtered animals, but with more careful selection of animals for the market and the present improved methods of handling and storage there is little ground for such prejudice.

Many persons, especially children, dislike mutton, and even lamb, because of the peculiar texture of the fat, especially when it is cold. When the meat has been cooked by broiling or roasting the flavor as well as the texture of the fat is more agreeable. Since it is desirable that children form the habit of accepting without question any wholesome food, it will be quite worth the trouble required to serve the fat in such a way that they will not become prejudiced against the meat itself. Hot lamb or mutton should be served from a hot dish on hot plates, in order to prevent the fat from hardening too quickly, and it goes without saying that gravy should always be served from a hot dish.

The average cuts of lamb and mutton contain a somewhat higher percentage of fat than is found in beef, but because of the peculiar texture of this fat, especially when cold, perhaps less of it is actually eaten than in the case of beef. Nevertheless, it is quite likely that on the whole the lamb and mutton actually eaten have a larger percentage of fat and consequently a slightly higher fuel value than beef. As regards ease and thoroughness of digestion there is little if any difference between the two kinds of meat.

## USE OF LAMB AND MUTTON ON THE FARM.

Few grown sheep weigh over 75 pounds when dressed, while dressed lambs range from 40 to 50 pounds in weight. The ease with which

animals of this size can be slaughtered on the farm is shown in another bulletin of this series.<sup>1</sup> The fact that the carcass is small is an advantage, since there is not too much meat to be used while it is still in good condition. This makes the sheep a very desirable animal for use as part of the farm supply of fresh meat.

Before a lamb or sheep is slaughtered on the farm it is well to consider the order in which the various parts will be used, also the methods that may be employed for keeping in good condition the cuts which will be needed later.

Unless good cold storage is available it will be better to divide the carcass into as few cuts as possible, thereby avoiding extra handling and the exposure of numerous freshly-cut surfaces. Certainly no fancy trade cuts, such as "crown roast" or the "French" trimming of the leg or chops, should be made unless one wants them for special occasions and the pieces are to be cooked at once.

Figure 1, A, shows the first cuts which might be made in a lamb carcass for farm use. These are the cuts usually known as wholesale cuts. Further divisions usually made by retailers are shown in Figure 1, B, where breast and fore

shanks (5) are separated from the neck and shoulders (4) and from the rib chops or roast (3). The weights of these cuts from a 50-pound carcass would be about as follows:

## Weights of different cuts of lamb.

	Pounds.
Legs, each -----	8.25
Whole loin, including flank -----	8.50
Ribs -----	6.00
Shoulders, including neck -----	11.75
Breast and shanks -----	7.25

Since obtaining fresh meat is the prime object of the home butchering, it should be the practice to begin to use the meat as soon as it is well cooled. The internal organs will probably be used first. The liver may be broiled with bacon, and the heart and tongue, eked

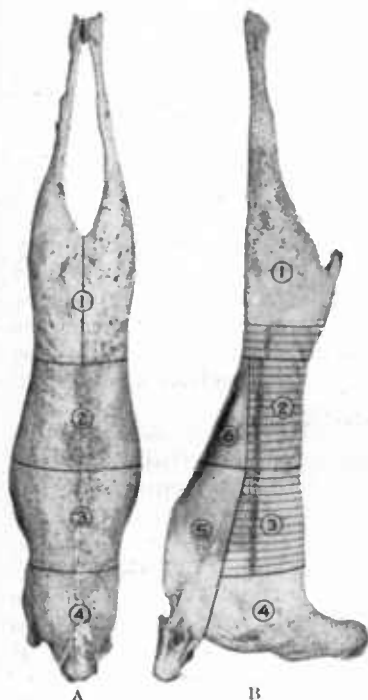


FIG. 1.—A, Wholesale cuts of lamb or mutton: (1) Legs, (2) loin, (3) hotel rack, (4) chuck; (1) and (2) together make the cut known as the saddle, (3) and (4) together make the forequarters or market rack. B, Retail cuts of lamb or mutton: (1) Legs, (2) loin, (3) hotel rack, (4) chuck, (5) breast, (6) flank.

<sup>1</sup> Farmers' Bul. 1172, Farm slaughtering and use of lamb and mutton.

out with the head or a piece of the flank, may be simmered for two or three hours and served either hot or cold. Dumplings are a much-liked addition to this dish. Any left-over boiled lamb or mutton is most excellent fried a light brown in a little butter as a supper or lunch dish. Of course, broiled chops and a leg or loin roast will be among the early treats in the way of fresh meat.

## METHODS FOR TEMPORARY PRESERVATION OF THE MEAT.

If the meat can not be used promptly methods of preservation should, of course, be employed without delay, since spoilage awaits no one's convenience.

In dry, clear weather, even in summer, a leg of lamb or mutton may be kept for days in good condition by hanging it from a sterilized hook where it will swing free in a current of air. The place must be screened completely from flies, but the screening must not touch the meat nor interfere with the free circulation of air. The dry film which forms on the surface of the meat is its protection against the inroads of bacteria.

Where there is a fairly cool storage place, stewed, braised, or boiled meat may be preserved for some time by sealing carefully under a thick layer of fat. The rather hard fat of lamb or mutton is especially satisfactory for use in this method, which is an adaptation of the well-known one of "frying down." The meat is seasoned and cooked as if it were to be used at once, but certain special precautions must be observed. No more meat should be stored in one container than can be used promptly, once it has been opened. To make sure that not only the meat but also the container in which it is to be stored is sterilized, it is well to cook the meat in the container itself. An enameled pan, or an earthenware jar or crock, will be found satisfactory, but a metal container should not be used. The meat should be placed in the container in such a way that it will be fairly well covered by the broth. If there is not enough fat to insure a thick layer over the top when the dish has cooled, more should be added in the cooking. When the meat is cooked the container should be set aside where it will not be disturbed until the fat has become solid over the top. In case the meat is found protruding through the fat in places, more fat, heated frying hot, should be poured over it. Store in a cool place in order to keep the fat solid. When the meat is to be served, remove the cold fat carefully and reheat the meat. It should be remembered that if the seal of fat is found to be broken the condition of the meat is to be questioned, as it would be in the case of canned meat in a "leaky" can.

Lamb and mutton, like other meats, may be satisfactorily canned at home. A steam-pressure cooker is frequently recommended for the purpose, especially in warm regions. Directions for the use of the pressure cooker are given in another publication of the department.<sup>2</sup>

As an aid in utilizing the odds and ends of trimmings from the carcass of lamb or mutton, the lean scraps may be ground fine, sea-

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<sup>2</sup> U. S. Dept. Agr., S. R. S. Doc. 80, Home canning of meats and sea foods with the steam-pressure canner.

soned to taste, and made into a loaf or cooked as Hamburg steak. These preparations may be kept for some time after cooking by covering them with hot fat, using the precautions suggested above.

To avoid monotony, the serving of the fresh lamb or mutton should be interrupted every few days by using such meats as poultry, ham, fresh or salt fish, or dried beef.

Preserving the meat by means of salt is effective, of course, but meat so treated is no longer "fresh" meat. However, circumstances may make it necessary to cure a cut or two in this way. In this case the following directions for dry-curing small quantities of meat, adapted from another bulletin<sup>3</sup> of the department, may be used:

#### DRY-CURED LAMB OR MUTTON.

Trim the pieces into shape and inspect each one carefully to see that all blood vessels are drained and clots of blood removed. For each 10 pounds of meat use a mixture of the following:

1½ cups salt.	2 tablespoons black pepper.
¾ cup brown sugar.	1 tablespoon salt peter.
1 tablespoon cayenne pepper.	

Rub the mixture over the meat, being careful to cover every portion. If necessary, more of the mixture may be rubbed onto the meat from time to time. Keep the pieces in a dry place free from flies or vermin. Wash and scrape the meat well before cooking to remove the excess of the preservatives used.

Smoked mutton, an old-fashioned form of cured meat, can be used like dried beef.

#### UTILIZATION OF THE FAT.

The fat which cooks out from lamb and mutton mixed with that from bacon or ham will be found to be satisfactory for many uses. Fats from the top of stews or broth or from the roasting pan may also be used as a savory fat in the seasoning of vegetables.

Where the excess fat from an entire carcass is to be disposed of, the leaf and other fine fats may be rendered and saved until these can be conveniently combined with lard in about equal proportions for use as shortening or in frying. The less desirable portions of fat trimming can be rendered, unsalted, for use where any heavy grease is needed.

The following method may be used for modifying the flavor of lamb or mutton fat: Mix two parts of lamb or mutton suet with one part of leaf fat of pork, grind the mixture fine, and heat in a double boiler with about half its weight of whole milk. By this method the fat is quickly released from the tissues and when strained and allowed to cool forms a cake on the surface of the liquid. This fat possesses little of the characteristic "mutton" odor or flavor.

Where lamb or mutton fat is used in making cream gravy both the texture and the flavor of the gravy are better if the flour used is browned lightly in the hot fat before the liquid is added. The addition of capers, or the liquid in which they have been bottled, chopped pickle, lemon juice, tomatoes, or currant jelly is suggested as improving the flavor of the gravy.

<sup>3</sup> Farmers' Bul. 1172, Farm slaughtering and use of lamb and mutton.

## REFUSE AND WASTE.

No matter whether a sheep is slaughtered in a packing plant or on the farm, only about 45 per cent of the live weight of the animal appears as dressed meat, and, after all the superfluous tallow—that is, the fat ordinarily removed before the cut is sold at retail—has been removed the remainder consists of about 19 per cent of bone and 81 per cent of edible material.

It is not possible to state exactly what the amount of waste in bone will be in any given retail cut because of variations in the size and grade of the carcass.

The following table showing the approximate percentage of bone in various cuts is based upon data obtained by weighings made of the cuts from a carcass of lamb of average size and grade. The corresponding cuts of mutton usually yield slightly higher percentages of edible material, owing to the fact that mutton carcasses are somewhat better filled out than lamb.

*Approximate percentage of bone in various cuts of lamb after removal of superfluous tallow fat.*

Name of cut.	Number of cut as shown in Fig. 1.	Approximate percentage of bone.	Approximate percentage of edible material.
Saddle (wholesale cut, excess fat removed).....	Nos. 1 and 2, Fig. 1, A.	17.6	82.4
Market rack (wholesale cut).....	Nos. 3 and 4, Fig. 1, A.	21.2	78.8
Leg (excess fat removed).....	No. 1, Fig. 1, B.	20.0	80.0
Loin (excess fat removed).....	Nos. 2 and 6, Fig. 1, B.	12.3	87.7
Loin, roast, or chops (flank and excess fat removed).....	No. 2, Fig. 1, B.	15.2	84.8
Ribs, trimmed short (hotel rack).....	No. 3, Fig. 1, B.	18.3	81.7
Shoulder, including neck.....	No. 4, Fig. 1, B.	21.1	78.9
Breast and fore shank.....	No. 5, Fig. 1, B.	24.0	76.0

## SELECTION AND USE OF THE MEAT.

The percentage of waste is of first importance, but is not the only point which is considered in selecting cuts of lamb and mutton. The color of the lean and the fat, the size of the bones, the general shape of the cuts should all be noted.

Good lamb or mutton will show a fairly complete covering of fat and the loin fat around the kidneys will be white and flaky. Other things being equal, there is less waste in cuts having moderate amounts of fat. The color of the lean of lamb is reddish pink, while the lean of mutton is darker. The loin or rib chops of lamb are not large, but they should show good full "eyes" of lean with a border of fat. Similar cuts of mutton should have the same general finish and, though larger than corresponding cuts of lamb, the bones of young mutton will still be fairly light in weight. The legs of both lamb and mutton should be plump without much length of shank.

Experience has shown that certain cuts are more tender and juicy than others, as well as easier to prepare and more attractive in appearance, and are for these reasons the first choice of most persons. In the carcasses of all meat animals the tender cuts are found along



the back from behind the shoulders, including the ribs, loin, rump, and the upper portion of the hind legs. In the remainder of the carcass, that is, in the neck, forelegs, shoulders, and the hind shanks, are found muscles which have been more actively used by the animal and which contain comparatively large amounts of firm connective tissue. The heart is a striking example of muscle tissue hardened by constant use.

### COOKING OF TENDER MEAT.

In cooking tender meat one general method is to be used. The chop or roast is first thoroughly seared on all sides and slightly browned by subjecting it to high heat. After this has been done the heat is reduced somewhat and the meat is cooked to the desired degree in its own juices.

The problem of broiling or roasting is to complete the cooking of the inner part of the cut without overcooking the surface. In the broiling of chops this is done by turning them frequently which allows for intermittent cooling of one surface while the other is exposed to the heat.

In roasting the hardening of the surface is lessened by basting with water or by covering the roaster after the meat is first browned, so that the confined steam accomplishes the basting.

### COOKING OF THE TOUGHER CUTS.

Since it is the connective tissue which causes the comparative toughness, it is to this that the housekeeper must direct her attention. Either one of two methods may be used. The meat may be finely ground, thereby cutting the connective tissue into very small pieces, or it may be cooked in water until the connective tissue is softened.

In the preparation of ground meat it is well to put the meat through the grinder twice, using the fine blade. Ground meat should be cooked in the same way as any tender meat; that is, by first searing the surface well in order to prevent the escape of the juices, then reducing the heat to finish the cooking.

In the cooking of tough meat in water the connective tissue is gelatinized and so made soft, but in order to avoid cooking the meat to pieces the water should be kept simmering instead of boiling. By allowing enough time for the cooking to be done without hurrying, very satisfactory results may be obtained with meat that is quite unpromising. The same principle applies whether the meat is boiled, stewed, braised, or smothered.

The steam-pressure cooker is frequently used for tough cuts of meat, as in it the connective tissues are softened much more quickly than by ordinary cooking.

Notwithstanding the fact that the less tender cuts of meat are usually taken as a second choice, they furnish meat that is highly desirable both from the point of view of nutritive value and flavor. Also, the preparation of such meat is not difficult, provided it is properly understood and managed. This division of the carcass according to whether the meat is tender or comparatively tough suggests differences in the methods of cooking.

## RECIPES.

The recipes given here for lamb and mutton are planned to include all the different cuts of the carcass and will be of help to a house-keeper who may wish to extend her choice of cuts beyond the stereotyped range of chops, roasts, and stews.

### LEG, LOIN, OR RIB ROASTS.

The leg, loin, and rib are the cuts of lamb or mutton best suited for roasting. See that the meat is clean, but avoid washing it. The pink skinlike layer should be removed from the surface. Place the meat in the roasting pan on a rack or use a roaster which is supported upon a rim which holds it up from contact with the bottom of the oven. Brown the surface well in a hot oven. This will probably require about 15 minutes. Then reduce the heat and continue the roasting, allowing 15 minutes to each pound of meat or a little longer if the cut is thick. In case gas is the fuel used and the roast is a small one the preliminary browning can be done more economically in a frying pan over one of the top burners. Baste the roast every 15 minutes unless a covered roaster is used.

If the meat rests upon a rack a small quantity of water may be kept in the bottom of the pan to prevent the drippings from becoming too brown. The water should not come in contact with the roast.

Some of the sauces and relishes suitable for serving with roast lamb or mutton are suggested here.

#### MINT SAUCE.

$\frac{1}{4}$ cup finely chopped mint leaves.	1 tablespoon sugar.
$\frac{1}{2}$ cup vinegar.	

Mix all the ingredients and let stand for an hour before serving.

#### MINT JELLY.

Apple jelly flavored with mint is a very good accompaniment for roast lamb or mutton. Make apple jelly as usual, and when ready to pour flavor it with mint or mint extract. Mint jelly may also be made by flavoring gelatin with mint.

#### CURRENT-JELLY SAUCE.

Pour off the excess fat from the drippings in the pan. Brown 2 tablespoons of flour in 2 tablespoons of the fat and add to the drippings. If necessary more hot water should be added. Boil the sauce until it thickens, stirring well from the bottom and sides of the roaster. Season with salt. Strain the gravy if necessary. Beat in one-half glass or more of currant jelly. Serve hot.

#### APPLE GARNISH.

One-half hour before the roast is done pare and core sour apples, cut them in quarters and place in the roaster where they will bake in the drippings. When the apples are done serve with the drippings in a heated gravy dish.

#### SPANISH SAUCE.

2 tablespoons lean, raw ham, chopped.	$\frac{1}{4}$ cup flour.
2 tablespoons celery, chopped.	$1\frac{1}{2}$ cups water or stock.
2 tablespoons carrot, chopped.	$\frac{1}{2}$ cup strained tomato.
1 tablespoon onion, chopped.	Salt and pepper.
$\frac{1}{4}$ cup butter or other fat.	

Cook the ham and vegetables slowly in the fat until done. Add the flour, stock, and tomatoes. Season with salt and pepper. Cook for five minutes and serve.

#### BROILED CHOPS.

Trim the pink skin and superfluous fat from the chops and broil them quickly on both sides by turning them back and forth on the broiler or in a hot, dry, frying pan. As soon as they are well seared and brown reduce the heat and

finish the cooking, which should take from 8 to 12 minutes in all according to the thickness of the chops and whether they are liked rare or well done. In case the broiling is done in a pan pour off the fat as it cooks out in order to prevent the chops from frying in their own fat. Since broiled chops should be served promptly the other dishes of the meal should be practically finished before the broiling is begun.

#### ONION SAUCE FOR CHOPS.

6 large white onions, ground fine.  
1 teaspoon sugar.  
Salt.

$\frac{1}{2}$  cup of butter or other fat.  
1 tablespoon flour.

Cook the onions, sugar, salt, and half the butter together slowly for about 45 minutes. Melt the remaining butter, blend the flour with it, and add to the cooked onion, stirring well until the mixture boils. Serve hot with chops or roast.

#### PURÉE OF NAVY BEANS TO ACCOMPANY CHOPS AND ROAST.

1 pint beans.  
1 onion.  
1 carrot.  
1 sprig parsley.  
Pepper.

$\frac{1}{2}$  pound salt pork or 2 tablespoons  
mutton drippings.  
2 cloves.  
 $\frac{1}{2}$  teaspoon salt.  
1 quart water.  
1 tablespoon butter.

Soak the beans overnight, drain, and add the other ingredients with the exception of the butter. Boil for 30 minutes and cook in a moderate oven for one hour. Remove the onion, carrot, and parsley, and press through a sieve. Add butter and salt, if necessary, and reheat. Similar purées may be made from red kidney beans, split peas, and lentils.

#### LAMB OR MUTTON LOAF.

Grind any lean lamb or mutton, using the fine blade of the grinder, season with salt and pepper and form into a loaf. Oil the surface with melted fat, dredge with flour, and brown well in a hot oven. Reduce the heat and cook slowly for one hour. Serve with tomato sauce (see p. 9).

#### LAMB OR MUTTON SAUSAGE.

1 pound lamb or mutton free from  
bone.  
 $\frac{1}{2}$  pound fat fresh pork.  
 $\frac{1}{2}$  teaspoon black pepper.

$\frac{1}{2}$  teaspoon salt.  
 $\frac{1}{4}$  teaspoon each marjoram, thyme, and  
sage.

Put the meat through a grinder and mix thoroughly with the other ingredients. Form into cakes and fry till well done.

#### "BOILED" LAMB OR MUTTON.

The first thing to be remembered is that "boiled" meat is not boiled but simmered.

Prepare the leg or shoulder for cooking. Have ready a large kettle containing enough boiling water to cover the meat. Lower the meat into the water, taking care that it is entirely submerged. Bring the water again to the boiling point, then place kettle where water will simmer as shown by continued motion on one side of the kettle. Continue the simmering until the meat is tender, from an hour and a half to two hours for lamb and from two to three hours for mutton. While cooking add to the water salt, pepper, and any other seasonings liked. Avoid piercing the meat with a fork. Serve either hot or cold.

#### SAUCES FOR "BOILED" LAMB OR MUTTON.

##### CAPER SAUCE.

Make a thin sauce using  $1\frac{1}{2}$  tablespoons butter or other fat,  $1\frac{1}{2}$  tablespoons flour, 1 cup water or clear soup stock,  $\frac{1}{2}$  teaspoon salt, and pepper according to taste. Add  $\frac{1}{2}$  cup of capers drained from the liquor in which they were bottled.

**MOCK CAPER SAUCE.**

Make a sauce according to the directions for caper sauce but use chopped pickle or chopped stuffed olives instead of capers.

**TOMATO SAUCE.**

1 cup strained tomato.  
 $\frac{1}{2}$  cup water or meat stock.  
 1 bay leaf.  
 1 teaspoon salt.

Pepper.  
 4 tablespoons butter or drippings.  
 4 tablespoons flour.

Brown the flour lightly in the fat. Add the tomato juice, water, and seasonings. Stir the mixture well until it boils up thoroughly. Remove the bay leaf before serving.

**PARSLEY SAUCE.**

2 tablespoons butter or rendered lamb  
 or mutton fat.  
 2 tablespoons flour.  
 1 cup milk or mutton broth.

Salt.  
 Juice of  $\frac{1}{2}$  lemon.  
 1 tablespoon finely chopped parsley.

Melt the fat, add the flour, and cook for two or three minutes, stirring constantly. Add the milk or broth and cook until the liquid is thickened. Season with salt. Just before serving add the lemon juice and parsley.

**HORSE-RADISH SAUCE NO. 1.**

(For cold boiled mutton.)

2 tablespoons cracker crumbs.  
 2 tablespoons butter or mutton fat.  
 $\frac{1}{2}$  teaspoon salt.

1 cup milk.  
 $\frac{1}{4}$  cup grated horse-radish root.

Cook the crumbs, horse-radish, and milk 20 minutes in a double boiler. Add the remaining ingredients and serve either hot or cold.

**HORSE-RADISH SAUCE NO. 2.**

$\frac{1}{2}$  cup thick cream.  
 3 tablespoons grated horse-radish root.

1 tablespoon vinegar.  
 Salt and cayenne.

Whip the cream and add the other ingredients.

**BAKED STUFFED SHOULDER.**

Remove shoulder blade and fill the cavity thus formed with a stuffing made of the following ingredients:

1 cup cracker crumbs.  
 4 tablespoons butter or other fat.  
 $\frac{1}{4}$  cup boiling water.

$\frac{1}{2}$  teaspoon salt.  
 $\frac{1}{4}$  teaspoon pepper.  
 A little sage or thyme if liked.

Mix the seasonings with the dry crumbs and moisten with the butter and hot water.

Place the prepared meat in the roasting pan. Rub drippings over the surface, sprinkle with pepper and salt, dredge with flour, and brown quickly in a hot oven. Pour half a cup of hot water over the meat, adjust the cover of the roaster closely, and cook two to three hours in a slow oven. No basting will be required.

Serve with a sauce made by heating a half cup of chopped sweet pickle of any sort with the gravy in the pan.

**BROWN STEW OF LAMB OR MUTTON.**

Cut lean lamb or mutton into small pieces, season these with salt and pepper, dredge them in flour, and brown on all sides in hot fat. Remove to a saucepan and half cover the meat with hot water. Let simmer until tender. Thicken the broth with a little flour which has been browned slightly in an equal amount of fat. Serve with plain boiled or baked potatoes and a green salad.

If a combination with vegetables is liked, these should be cut into small pieces and added in ample time for them to be thoroughly cooked without the necessity of actually boiling the stew. Starchy materials such as rice or

macaroni should be cooked separately, although potatoes cut small can be cooked satisfactorily with the meat at the simmering temperature.

The variations which can be made upon the plain stew are suggested by the following list of vegetables and seasonings, which may be added singly or in combination: Apples, string beans, lima beans, cabbage, carrots, celery, eggplant, okra, onions, peas, peppers, potatoes, radishes, squash, tomatoes, and turnips; curry powder, celery seed, garlic, thyme, marjoram, parsley, bay leaves, lemon juice, and capers.

#### BREAST OF LAMB WITH VEGETABLES.

Season a breast of lamb with salt and pepper and simmer until the bones can be slipped out easily. Remove from the water. In the meat stock cook vegetables such as turnips, carrots, celery, or onions cut in small pieces, green beans, peas, and okra. More salt may be needed. A few potatoes cut small may be added to cook during the last 20 minutes.

Remove the bones from the meat, fold it together, and secure with small skewers or twine. Dredge with flour and brown on both sides in hot fat. Place on a hot platter and surround it with the vegetables which have been well drained.

#### BRAISED BREAST OF LAMB OR MUTTON.

Season a breast or shoulder of lamb or mutton, place in a covered casserole or roaster and surround by vegetables prepared as in the previous recipe. Add a little water, cover the pan closely, and cook in a slow oven until the meat is tender, probably from an hour and a half to three hours.

#### PRESSED LAMB.

Simmer the head, neck, and other ragged pieces of lamb in a small amount of salted water until the meat falls from the bones. The lamb liver may be included. When cool remove the bones and excess fat, add a little lemon juice and other seasoning to taste, and chop or grind the meat. Dissolve a tablespoon of plain gelatin in one cup of the liquor from the saucepan and pour over the meat. Mix well, place in a suitable mold, and put in a cold place. When the jelly has set, it may be cut in slices and served.

#### THICK SOUP.

Thick soup which may be served as the main dish at luncheon or supper may be prepared from the neck, rib ends, shanks, and other bony parts of the carcass.

Place meat and bones together in a kettle, using water sufficient to cover. Season with salt and two or three cloves and peppercorns. Let simmer until the meat can be easily separated from the bones, then pour through a colander. Set the strained broth aside to cool in order that the fat may be removed easily. Carefully free the meat from the bones and chop it fine. After removing the excess fat from the broth return the latter to the kettle and add any desired combination of chopped carrots, onion, celery, turnips, and potatoes which have been previously cooked together either in a little water or in a steamer above the soup kettle; also previously cooked rice, barley, macaroni, or spaghetti may be added if desired. Reheat the soup, add the chopped meat, and serve hot. If dumplings are liked, these may be cooked in the soup just before the meat is added. Since the dumplings must be boiled and the meat should not be boiled, do not return the meat to the kettle until the dumplings are done.

#### DUMPLINGS.

Dough prepared as for baking-powder biscuit may be rolled out about half an inch thick, cut with a small cutter, and cooked for 10 minutes on the top of the boiling soup. The kettle should be kept covered during the entire time of cooking the dumplings.

#### UTILIZATION OF LEFT-OVER COOKED MEAT.

Housekeepers are sometimes at a loss to know how to utilize the less desirable parts of a cut, since often there is not enough of this to make the preparation of an extra dish from the fresh trimmings

worth while. The first suggestion would be that whenever the results would be at all satisfactory, the piece of meat be prepared untrimmed. For example, the flank which comes with a loin roast may be folded under and cooked with the loin itself. So cooked it would be ready not only for possible use later but would stand a chance of being used and enjoyed at the first serving. Again, the less desirable portions may be ground fine, seasoned well, and cooked under the main cut, as a dressing. In short, the hint is given that the utilization of tough meat does not always mean soup or a stew.

Once the meat is cooked there are numerous and simple ways for making use of the left-overs. A few suggestions are given below:

#### COLD SLICED MEAT.

If the left-over meat can be sliced and served cold the process is quite simple. With this cold meat serve a hot dish such as creamed potatoes or scalloped tomatoes.

#### SALMI OF LAMB.

Cold cooked lamb which is not in shape to serve sliced may be cut into smaller pieces and reheated in Spanish sauce (see p. 7).

#### CROQUETTES AND MEAT CAKES.

All sorts of scraps of the cold cooked meat may be ground fine, seasoned well, bound together with gravy or mashed potato, formed into croquettes, dipped in egg and bread crumbs and fried in deep fat. The meat may be formed into flat cakes, dredged in flour and browned in a little fat in a frying pan. Avoid having the mixture too dry, and never use raw flour as a binder, since it is not sufficiently cooked in the short time required to fry the cakes.

#### MUTTON OR LAMB PIE.

Chop scraps of cold meat into small pieces, cover with gravy, or hot water and savory fat, season as desired and heat in a baking dish in the oven. When thoroughly heated cover the top with a crust made as for baking-powder biscuit. Return to the oven and bake until the crust is done.

#### MOLD OF LAMB OR MUTTON AND RICE.

A more delicate "pie" is made by lining a buttered baking dish with cooked rice, filling with the chopped meat and gravy, covering this over with more rice. Set the dish in a steamer and steam for one hour. The "pie" may be served from the dish, or with care it may be turned out whole on a platter, where it will appear as a mound of plain rice.

#### QUICK LAMB PATTIES.

Quick patties may be made by baking shells of pie crust or biscuit dough in muffin pans and filling these with hot meat and gravy such as is used in the preceding recipe. Meat may be similarly served on slices of toast.

#### LAMB OR MUTTON SALAD.

When the amount of left-over meat is small it may be combined with vegetables or hard-cooked eggs and served as a salad.

#### SPECIAL RECIPES FOR MUTTON.

A few recipes specially adapted to the preparation of mutton rather than of lamb are given below:

#### CURRY OF MUTTON.

2 pounds mutton from the forequarter.	Salt.
1 onion.	Boiling water.
1 teaspoon vinegar.	2 tablespoons flour.
1 teaspoon curry powder.	

Fry the meat in a little of the fat until it is a delicate brown. Add the onions and pour over all enough boiling water barely to cover. Cook until the

meat is tender. Add the curry powder, vinegar, and salt. Remove the meat, reduce the broth to 1 cup, and thicken it with 2 tablespoons of flour blended with 1 tablespoon of melted fat. Add the meat to the gravy and reheat. Serve with rice.

#### SHEEP'S TONGUES.

6 sheep's tongues.	2 slices bacon.
2 carrots cut into small pieces.	$\frac{1}{2}$ cup capers.
1 pint boiling water.	3 small cucumber pickles.
1 large onion cut into small pieces.	Salt and pepper.

Scald the tongues, throw them into cold water, and remove the skins. Cover the bottom of a baking dish with bacon cut into fine strips, place over this the tongues, season with salt and pepper, and cover with another layer of sliced bacon. Add the minced carrots and onion, salt and pepper to taste, and about a pint of boiling water or broth. Cover the dish and cook slowly for about three hours. Take out the tongues and place them on a hot dish, strain the sauce, reheat, add one-fourth cup of capers and three small cucumber pickles, sliced thin. Stir well and let the sauce boil up once. Pour over the tongues and serve.

#### TURKISH STUFFED TOMATOES.

In Turkey a number of dishes are prepared from mutton which are interesting from the point of view of the food customs of another country, and also palatable. The following recipe for stuffed tomatoes is a little different from many used in this country:

2 tablespoons cooked rice.	2 onions.
$\frac{1}{2}$ pound raw mutton.	12 smooth round tomatoes.

Pass the materials through a meat grinder; season with salt, pepper, and chopped parsley; fry in a pan for 10 minutes, stirring constantly. Wash the tomatoes, cut a thin slice from the stem end, leaving a little of the skin for a hinge, remove the seeds and pulp, and fill with the meat mixtures. Bake in a pan for 20 minutes, lift out with a broad knife and serve hot.

#### MUTTON AND EGGPLANT PIE.

Eggplant pie is a simple dish made by cooking together in a baking pan alternate layers of eggplant and of chopped mutton fried in its own fat. A little tomato juice may be added or a few sliced tomatoes. Bake until well browned.

#### MUTTON BAKED WITH APPLES AND ONIONS.

2 pounds mutton cutlets from neck.	1 onion.
Salt.	4 medium-sized sour apples.

Prepare the meat by removing the bone and superfluous fat. Season with salt and lay in a baking dish. Cover the meat with finely sliced apples and finely chopped onions. Bake in a moderate oven until the meat is tender, which will be about 1 hour.

#### SOUPS AND BROTHS FOR THE SICK.

Probably because of its characteristic flavor lamb or mutton are seldom used in the making of a clear soup or consommé for serving as the first course for a dinner. The following directions for the preparation of clear soup, broths, and meat juices are therefore given especially from the point of view of food for the sick:

#### LAMB OR MUTTON JUICE.

To a half cup of lean lamb or mutton finely ground, add an equal amount of cold boiled water. Stir the mixture well until the meat becomes grayish in color. Strain through cheesecloth or a very fine wire strainer, being careful to press out all the juice. Pour the juice into the cup in which it is to be served. Stand the cup in a small saucepan and carefully pour boiling water around it to the height of the liquid in the cup. Stir the juice constantly until it becomes hot enough to be palatable, usually from 3 to 4 minutes. Season with a little salt and serve at once.

This "tea" contains most of the flavoring matter of the meat and a part of the albumin and of the mineral salts, but while it is appetizing in flavor its food value is not great.

A clear soup of good flavor which contains gelatin as well as mineral matter, and is for this reason more satisfactory for use in cases wherever liquid food alone must be depended upon for some time, is prepared as follows:

2 pounds of neck of lamb or mutton. | 1 cup of cold water.

Remove the excess fat from the meat and chop both meat and bones into small pieces. Add the water, place in a double boiler and cook for 4 or 5 hours. Strain through muslin. Season with salt (if salt is allowed). Let stand until the fat hardens. Remove the fat and serve the soup either hot or cold as preferred by the patient. If lamb fat has been prescribed a teaspoonful should be added to each half cup of soup, which will, of course, need to be served hot. Even though this extract gelatinizes on cooling, it can still be served in a liquid diet for the reason that the solid gelatin becomes liquid as soon as taken into the mouth.

### SUMMARY.

Lamb and mutton have long been important foods in many parts of the world.

Mutton is very popular in England, but in America lamb has been preferred to mutton and is consequently much higher in price.

Many persons dislike mutton and even lamb on account of the texture of the fat, but the fat may be rendered more acceptable if carefully prepared and served hot.

Few full-grown sheep weigh over 75 pounds when dressed, and dressed lambs range lighter. The ease with which animals of such weight can be slaughtered on the farm makes the sheep a very desirable animal for use in supplementing the farm supply of fresh meat.

When a lamb or sheep is slaughtered on the farm it is best to divide the carcass into simple divisions, thus avoiding numerous cut surfaces.

To avoid spoilage, methods of preservation should be used without delay.

Only about 45 per cent of the live weight of the lamb or sheep appears as dressed meat. Of this about 19 per cent is bone. It is not possible to state exactly what the amount of waste will be in any given retail cut because of variations in the size and grade of the carcass.

The carcasses of all meat animals contain tender flesh and that which is less tender. The muscles which have been little used are tender, while those which have been actively exercised are comparatively tough.

The cooking of tender meat is a simple process. Usually the piece is seared quickly on all sides by using intense heat, after which the heat is reduced and the meat is cooked to the desired degree in its own juices.

In tough meats the connective tissue is the part to which the housekeeper must direct her attention. The meat may be finely ground, which will divide the connective tissue into small pieces, or the meat may be simmered in water for some time, by which means the connective tissue will be gelatinized and softened, yet the meat itself will not be "boiled" to pieces.

Variety may be obtained by the use of suitable sauces and other accompaniments.

The utilization of trimmings and left-overs does not always mean a soup or a stew. With a little forethought the practicing of economy here need not be too apparent.



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